

IN THE CLAIMS:

Please **CANCEL** claims 4, 5, 8 and 11 without prejudice or disclaimer, **AMEND** claims 1, 3, 6, 9, 10, and 12-20, and **ADD** new claims 21 and 22 in accordance with the following:

1. **(CURRENTLY AMENDED)** An information storage medium which stores data recorded using a waveform, comprising:
a first state corresponding to a recording pattern of the waveform; and
a second state corresponding to an erase pattern of the waveform,
wherein:
the erase pattern comprises a multi-pulse having with a power level of a leading pulse of the erase pattern set at a low power level of the multi-pulse and a power level of a pulse period between an end point of the erase pattern and a start point of a leading pulse of the recording pattern is set at a high power level of the multi-pulse, and
an end point of the recording pattern and a start point of the erase pattern are concatenated by a cooling pulse of the waveform.

2. **(ORIGINAL)** The information storage medium of claim 1, wherein:
the first state is a mark formed by a first level of an NRZI data signal, and
the second state is a space formed by a second level of the NRZI data signal.

3. **(CURRENTLY AMENDED)** The information storage medium of claim 1, wherein: ~~the recording pattern comprises another multi-pulse, and the cooling pulse extends from the multi-pulse of the recording pattern to the multi-pulse of the erase pattern~~ has a power level below the low power level of the multi-pulse of the erase pattern.

4-5. **(CANCELLED)**

6. **(CURRENTLY AMENDED)** The information storage medium of claim 1, wherein the waveform includes another recording pattern in which a power level of a period between a start pulse of the another recording pattern and an end of another erase pattern preceding the another recording pattern is adjusted according to a pulse of the multi-pulse of the another erase pattern.

7. **(PREVIOUSLY PRESENTED)** The information storage medium of claim 1, wherein

the data recorded using the waveform is modulated according to a Run Length Limited (RLL)(1, 7).

8. (CANCELLED)

9. (CURRENTLY AMENDED) The information storage medium of claim 1, wherein:
~~the erase pattern is recorded sequentially after the recording pattern,~~ the recording pattern comprises another multi-pulse, and
a first one of the another multi-pulses of the recording pattern after the period is adjusted to have has a power that is other than ~~a~~ the low power level of a ~~the first leading one of the multi-~~ pulses of the erase pattern.

10. (CURRENTLY AMENDED) The information storage medium of claim 49, wherein:
~~the erase pattern is recorded sequentially after the recording pattern,~~ the recording pattern comprises another multi-pulse, and
a first one of the another multi-pulses of the recording pattern after the period is adjusted to have has a power that is equal greater than to a the low power level of a ~~the leading first one of the multi-~~ pulses of the erase pattern.

11. (CANCELLED)

12. (CURRENTLY AMENDED) The information storage medium of claim 10, wherein the ~~multi-pulse of the erase pattern has a first pulse power and a second pulse power greater than the first pulse power, and the power of the first one of the~~ another multi-pulses of the erase recording pattern is equal greater than to the high power level of the first pulse power ~~erase pattern.~~

13. (CURRENTLY AMENDED) The information storage medium of claim 9, wherein the ~~multi-pulse of the erase pattern has a first pulse power and a second pulse power greater than the first pulse power, and the power of the first~~ leading pulse of one of the another multi-pulses of the recording pattern is equal greater than the power of the period between the end point of the erase pattern and the start point of the leading pulse of the another multi-pulse of the recording pattern ~~to the first pulse power.~~

14. **(CURRENTLY AMENDED)** The information storage medium of claim 9, wherein the another multi-pulse of the recording pattern further comprises a recording pulse having a recording power greater than the high power level of the ~~first one of the pulses of the recording erase pattern~~.

15. **(CURRENTLY AMENDED)** The information storage medium of claim 10, wherein the another multi-pulse of the recording pattern further comprises a recording pulse having a recording power greater than the high power level of the ~~first one of the pulses of the erase recording pattern~~.

16. **(CURRENTLY AMENDED)** The information storage medium of claim 1, wherein the high power level of the period cooling pulse is concatenating and included in the recording and erase patterns and has a cooling is other than power less than a power level of a ~~first-last~~ pulse of the multi-pulse of the erase pattern.

17. **(CURRENTLY AMENDED)** The information storage medium of claim 9, wherein the cooling pulse has a cooling power less than the a power of a last pulse of the another multi-pulse of the recording pattern and less than a the low power level of the ~~first-leading~~ pulse of the multi-pulse of the erase pattern.

18. **(CURRENTLY AMENDED)** The information storage medium of claim 1, wherein the high power level of the period is cooling pulse has a cooling power less than a recording power of the recording pattern and a power level of a ~~first-last~~ pulse of the multi-pulse of the erase pattern.

19. **(CURRENTLY AMENDED)** An information storage medium which stores data recorded using a waveform, comprising:

a first state corresponding to a recording pattern of the waveform; and

a second state corresponding to an erase pattern of the waveform,

wherein:

the erase pattern comprises a multi-pulse having a power level of a leading pulse of the erase pattern ~~set to~~ a high power level of the multi-pulse and a power level of a pulse period between an end point of the erase pattern and a start point of a leading pulse of a recording pattern ~~is set to~~ a the high power level of the multi-pulse, and

the recording pattern and the erase pattern are concatenated by a cooling pulse of the waveform.

20. **(CURRENTLY AMENDED)** An information storage medium which stores data recorded using a waveform, comprising:

a first state corresponding to a recording pattern of the waveform; and

a second state corresponding to an erase pattern of the waveform,

wherein:

the erase pattern comprises a multi-pulse having a power level of a leading pulse of the erase pattern ~~set to at~~ a low power level of the multi-pulse and a power level of a pulse period between an end point of the erase pattern and a start point of a leading pulse of the recording pattern ~~is set to at a the~~ low power level of the multi-pulse, and

the recording pattern and the erase pattern are concatenated by a cooling pulse of the waveform.

21. **(NEW)** The information storage medium of claim 19, wherein the high power level of the period is other than a power level of a last pulse of the multi-pulse of the erase pattern.

22. **(NEW)** The information storage medium of claim 20, wherein the low power level of the period is other than a power level of a last pulse of the multi-pulse of the erase pattern.